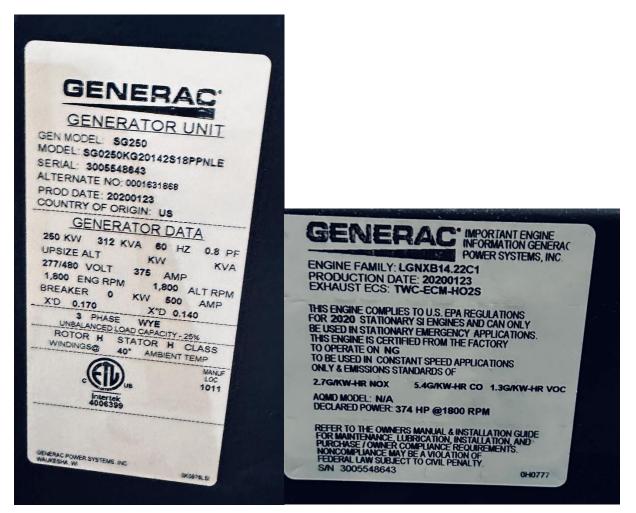


Stock #A03

250 kw Generac SG250 Standby Skid mounted natural gas engine generator set, $480/277 \, v$, 3 phase, 60 hz. EPA certified, power zone digital control, battery, battery charger silencer, gas regulator. 500 amps circuit breaker. Year manuf. 2020, 175.6 hours.

Shipping size and weight 136" L x 57" W x 68" H 6,000 lbs.





Quantity 1 - Generac Industrial gaseous engine-driven generator, turbocharged/aftercooled 6 cylinder 14.2L engine, consisting of the following features and accessories:

- Stationary Emergency-Standby rated
- 250 kW Rating, wired for 277/480 VAC three phase, 60 Hz
- Permanent Magnet Excitation
- No Enclosure (open-set)
- UL2200
- EPA Certified
- Power Zone Digital Control Panel for Single or MPS Generators
 - o Meets NFPA 99 and 110 requirements
 - o Temp Range -40 to 70 degrees C
 - Humidity 2 95% (Non Condensing)
 - o UL6200
 - o C-ETL-US
 - o CE
 - o FCC
 - o IEC801 (Radiated Emissions, Susceptibility, and Surge Immunity)
 - o 7" Resistive Color Touchscreen
 - Built-in Wi-Fi, Bluetooth, and Webserver
 - IP65 (front)
 - Auto/Manual/Off key switch, Alarm Indication, Not in Auto Indication, audible alarm, emergency stop switch
 - Dual Core Digital Microprocessor
 - RS485, Ethernet and CANbus ports
 - O All engine sensors are 4-20ma for minimal interference
 - Sensors: Oil Pressure, optional Oil Temp, Coolant Temp and Level, Fuel Level/Pressure (where applicable), Engine Speed, DC Battery Voltage, Run-time Hours, Generator Voltages, Amps, Frequency, Power, Power Factor
 - Alarm Status: Low or High AC Voltage, Low or High Battery Voltage, Low or High Frequency, Pre-low or Low Oil Pressure, Pre-high or High Oil Temp (optional), Low Water Level and Temp, Pre-high or High Engine Temp, High, Low, and Critical-low Fuel Level/Pressure (where applicable), Overcrank, Over and Under Speed, Unit Not in Automatic
 - Programmable I/O
 - Built-in PLC for special applications
 - Engine function monitoring and control:
 - Full range standby operation; programmable auto crank, Emergency Stop, Auto-Off-Manual switch
 - Isochronous Governor
 - 0.25% digital frequency regulation with: soft-start ramping adjustable, gain adjustable, overshoot limit adjustable
 - 3 Phase RMS Voltage Sensing
 - +/-0.5% digital voltage regulation with: soft-start voltage ramping adjustable, loss of sensing protection adjustable, negative power limit adjustable, Hi/Lo voltage limit adjustable, V/F slope and gain adjustable, fault protection

- o Service reminders, trending, fault history (alarm log)
- o I2T function for full generator protection
- o Selectable low-speed exercise
- o 2-wire start controls for any 2-wire transfer switch
- Natural Gas fuel system
- 21 Light Annunciator Surface
- Battery Charger, 10 Amp, NFPA 110 compliant, installed
- 225 AH, 1155 CCA Group 8D Batteries, with rack, installed
- Coolant Heater, 2000W, 240VAC
- Remote Emergency Stop Switch, Surface-Mount, shipped loose
- 3 Owner's Manuals
- 120V GFCI and 240V Outlet
- Alternator Strip Heater
- Oil Temp Sender
- Primary MLCB, 80% rated thermal-magnetic
 - o 500 Amp
- Single Exhaust System
- Standard 2-Year Limited Warranty
- SG0250KG20142S18PPNLE

SG250 | 14.2L | 250 kW

INDUSTRIAL SPARK-IGNITED GENERATOR SET

EPA Certified Stationary Emergency and Non-Emergency

CONFIGURABLE OPTIONS

GENERAC INDUSTRIAL POWER

DEMAND RESPONSE READY

ENGINE SYSTEM

- Engine Coolant Heater
- O Baseframe Cover/Rodent Guard
- O 2 Stage Air Cleaner
- Oil Heater
- O Air Filter Restriction Indicator
- O Radiator Stone Guard (Open Set Only)
- O Level 1 Fan and Belt Guards (Enclosed Units Only)

FUEL SYSTEM

NPT Flexible Fuel Line

ELECTRICAL SYSTEM

- 10A UL Listed Battery Charger
- O Battery Warmer

ALTERNATOR SYSTEM

- Alternator Upsizing
- Anti-Condensation Heater
- Tropical Coating

CIRCUIT BREAKER OPTIONS

- Main Line Circuit Breaker
- O 2nd Main Line Circuit Breaker
- O Shunt Trip and Auxiliary Contact
- Electronic Trip Breakers

GENERATOR SET

- Demand Response Rating
- Extended Factory Testing (3-Phase Only)
- O 12 Position Load Center

ENCLOSURE

- O Weather Protected Enclosure
- O Level 1 Sound Attenuated
- O Level 2 Sound Attenuated
- Level 2 Sound Attenuated with Motorized Dampers
- O Level 3 Sound Attenuated (Steel Only)
- O Steel Enclosure
- Aluminum Enclosure
- Up to 200 MPH Wind Load Rating (Contact Factory for Availability)
- O AC/DC Enclosure Lighting Kit
- Enclosure Heaters (Motorized Dampers Only)
- O IBC Certification
- O Door Open Alarm Switch

CONTROL SYSTEM

- NFPA 110 Level 1 Compliant 21-Light Remote Annunciator
- O Remote Relay Assembly (8 or 16)
- O Remote E-Stop (Break Glass-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Flush Mount)
- 10A Engine Run Relay
- O Ground Fault Annunciator
- O 100 dB Alarm Horn
- O Damper Alarm Contacts (Motorized Dampers Only)
- O 120V GFCI and 240V Outlets

WARRANTY (Standby Gensets Only)

- O 2 Year Standard Warranty
- O 2 Year Extended Limited Warranty
- 5 Year Limited Warranty
- 5 Year Extended Limited Warranty
- O 7 Year Extended Limited Warranty
- O 10 Year Extended Limited Warranty

ENGINEERED OPTIONS

ENGINE SYSTEM

- Coolant Heater Ball Valves
- O Fluid Containment Pans

CONTROL SYSTEM

O Battery Disconnect Switch

ALTERNATOR SYSTEM

O 3rd Breaker System

GENERATOR SET

- O Special Testing
- O Battery Box

INDUSTRIAL SPARK-IGNITED GENERATOR SET

EPA Certified Stationary Emergency and Non-Emergency

GENERAC INDUSTRIAL

APPLICATION AND ENGINEERING DATA

DEMAND RESPONSE READY

ENGINE SPECIFICATIONS

General

donoral	
Make	Generac
Cylinder #	6
Туре	In-line
Displacement - in ³ (L)	864.71 (14.2)
Bore - in (mm)	5.31 (135)
Stroke - in (mm)	6.50 (165)
Compression Ratio	9.5:1
Intake Air Method	Turbocharged/Aftercooled
Number of Main Bearings	7
Connecting Rods	Steel Alloy
Cylinder Head	Cast Iron
Cylinder Liners	Ductile Iron
Ignition	Electronic
Piston Type	Aluminum
Crankshaft Type	Ductile Iron
Lifter Type	Solid
Intake Valve Material	Special Heat-Resistant Steel

1
1

Cooling System Type	Pressurized Closed Recovery
Fan Type	Pusher
Fan Speed - RPM	1,894
Fan Diameter - in (mm)	30 (762)

Fuel System

Fuel Type	Natural Gas, Propane
Carburetor	Down Draft
Secondary Fuel Regulator	Standard
Fuel Shut Off Solenoid	Standard
Operating Fuel Pressure - in H ₂ O (kPa)	7 - 11 (1.7 - 2.7)

Engine Electrical System

System Voltage	24 VDC
Battery Charger Alternator	57.5 A
Battery Size	See Battery Index 0161970SBY
Battery Voltage	24 VDC
Ground Polarity	Negative

Engine Governing

Exhaust Valve Material

Hardened Valve Seats

Governor	Electronic
Frequency Regulation (Steady State)	±0.25%

High Temp Steel Alloy

High Temp Steel Alloy

Lubrication System

Oil Pump Type	Gear
Oil Filter Type	Full-Flow Cartridge
Crankcase Capacity - qt (L)	36.2 (34.3)

ALTERNATOR SPECIFICATIONS

Standard Model	K0250124Y21
Poles	4
Field Type	Revolving
Insulation Class - Rotor	Н
Insulation Class - Stator	Н
Total Harmonic Distortion	<5% (3-Phase)
Telephone Interference Factor (TIF)	<50

Standard Excitation	Permanent Magnet
Bearings	Sealed Ball
Coupling	Direct via Flexible Disc
Prototype Short Circuit Test	Yes
Voltage Regulator Type	Full Digital
Number of Sensed Phases	All
Regulation Accuracy (Steady State)	±0.25%

INDUSTRIAL SPARK-IGNITED GENERATOR SET

EPA Certified Stationary Emergency and Non-Emergency

OPERATING DATA



DEMAND RESPONSE READY

POWER RATINGS - NATURAL GAS

	Standby/Demand Response		Standby/Demand Response Prime		ime
Three-Phase 120/208 VAC @0.8pf	250 kW/313 kVA	Amps: 868	225 kW/281 kVA	Amps: 782	
Three-Phase 120/240 VAC @0.8pf	250 kW/313 kVA	Amps: 753	225 kW/281 kVA	Amps: 677	
Three-Phase 277/480 VAC @0.8pf	250 kW/313 kVA	Amps: 376	225 kW/281 kVA	Amps: 339	
Three-Phase 346/600 VAC @0.8pf	250 kW/313 kVA	Amps: 301	225 kW/281 kVA	Amps: 271	

MOTOR STARTING CAPABILITIES (skVA)

skVA vs. Voltage Dip

5 1		0 1	
277/480 VAC	30%	208/240 VAC	30%
K0250124Y21	630	K0250124Y21	506
K0300124Y21	790	K0300124Y21	609

FUEL CONSUMPTION RATES*

Natural Gas – scfh (m³/hr)

Percent Load	Standby/Demand Response	Prime
25%	1,020 (28.9)	990 (28.0)
50%	1,620 (45.9)	1,260 (35.7)
75%	2,520 (71.4)	1,980 (56.1)
100%	3,180 (90.0)	2,700 (76.5)

^{*} Fuel supply installation must accommodate fuel consumption rates at 100% load.

COOLING

		Standby/Demand Response	Prime
Air Flow (Fan Air Flow Across Radiator)	scfm (m³/min)	10,078 (285.4)	10,078 (285.4)
Coolant Flow	gpm (Lpm)	90 (340.7)	90 (340.7)
Coolant System Capacity	gal (L)	15 (54.9)	15 (54.9)
Maximum Operating Ambient Temperature	°F (°C)	122 (50)	122 (50)
Maximum Operating Ambient Temperature (Before Derate)		See Bulletin No. 0199270SSD	
Maximum Radiator Backpressure	in H ₂ O (kPa)	0.5 (0.12)	0.5 (0.12)

COMBUSTION AIR REQUIREMENTS

	Standby/Demand Response	Prime
Flow at Rated Power - scfm (m ³ /min)	506 (14.3)	455 (12.9)

ENGINE				EXHAUST			
		Standby/Demand Response	Prime			Standby/Demand Response	Prime
Rated Engine Speed	RPM	1,800	1,800	Exhaust Flow (Rated Output)	scfm (m³/min)	1,703 (48)	1,517 (43)
Horsepower at Rated kW**	hp	375	337	Max. Backpressure (Post Silencer)	inHg (kPa)	0.75 (2.54)	0.75 (2.54)
Piston Speed	ft/min (m/min)	1,950 (594)	1,950 (594)	Exhaust Temp (Rated Output - Post Silencer)	°F (°C)	1,357 (736)	1,340 (727)
BMEP	psi (kPa)	190 (1,313)	171 (1,182)				

^{**} Refer to "Emissions Data Sheet" for maximum bHP for EPA and SCAQMD permitting purposes.

Deration – Operational characteristics consider maximum ambient conditions. Derate factors may apply under atypical site conditions.

Please contact a Generac Power Systems Industrial Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528, and DIN6271 standards. Standby - See Bulletin 0187500SSB

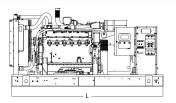
Demand Response - See Bulletin 10000018250

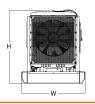
Prime - See Bulletin 0187510SSB

EPA Certified Stationary Emergency and Non-Emergency

DIMENSIONS AND WEIGHTS*

DEMAND RESPONSE READY

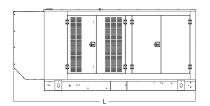


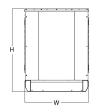


OPEN SET (Includes Exhaust Flex)

L x W x H - in (mm) 136.0 (3,454) x 57.1 (1,450) x 67.9 (1,725) 5,883 - 6,031 (2,668 - 2,735) Weight - Ibs (kg)

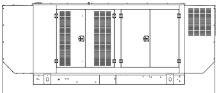
All measurements are approximate and for estimation purposes only -please refer to installation drawings for more accurate figures.





WEATHER PROTECTED ENCLOSURE

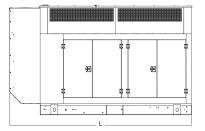
LxWxH-in (mm)	174.7 (4,437) x 57.5 (1,461) x 77.8 (1,976)
Weight - lbs (kg)	Steel: 7,448 - 7,596 (3,378 - 3,445) Aluminum: 6,654 - 6,801 (3,018 - 3,084)

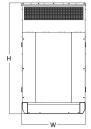




LEVEL 1 SOUND ATTENUATED ENCLOSURE

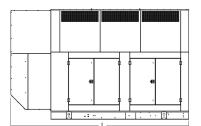
L x W x H - in (mm)	200.2 (5,085) x 57.5 (1,461) x 77.8 (1,976)
Weight - lbs (kg)	Steel: 7,911 - 8,059 (3,588 - 3,655) Aluminum: 6,853 - 7,000 (3,108 - 3,175)

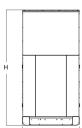




LEVEL 2 SOUND ATTENUATED ENCLOSURE

L x W x H - in (mm)	180.6 (4,587) x 57.5 (1,461) x 111.3 (2,827)
Weight - Ibs (kg)	Steel: 8,484 - 8,632 (3,848 - 3,915) Aluminum: 7,099 - 7,247 (3,220 - 3,287)





LEVEL 3 SOUND ATTENUATED ENCLOSURE

L x W x H - in (mm)	207.3 (5,265) x 63.7 (1,618) x 128.9 (3,274)
Weight - lbs (kg)	10,840 - 10,990 (4,916 - 4,984)



Specification characteristics may change without notice. Please contact a Generac Power Systems Industrial Dealer for detailed installation drawings.